Translation

PATENT COOPERATION TREATY

Rec'd PCT/PTO 2 1 APR 2005
REATY

PCT

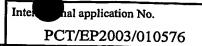
INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference 2002P17318WO	FOR FURTHER AC	TION	See Form PCT/IPEA/416				
International application No.	International filing date	e (day/month/year)	Priority date (day/month/year)				
PCT/EP2003/010576	23 September 200		22 October 2002 (22.10.2002)				
International Patent Classification (IPC) or national classification and IPC H04M 9/08							
Applicant							
SIEMENS AKTIENGESELLSCHAFT							
 This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36. 							
2. This REPORT consists of a total of	2. This REPORT consists of a total of 5 sheets, including this cover sheet.						
3. This report is also accompanied by A							
a. (sent to the applicant and to the International Bureau) a total of sheets, as follows:							
sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).							
sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.							
b. (sent to the Internation	al Bureau only) a to	tal of (indicate typ	e and number of electronic carrier(s))				
readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).							
4. This report contains indications relat	ing to the following item	ns:					
Box No. I Basis of the rep	port						
Box No. II Priority			İ				
Box No. III Non-establishn	nent of opinion with rega	ard to novelty, inventi	ve step and industrial applicability				
Box No. IV Lack of unity o							
Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement							
Box No. VI Certain docume							
Box No. VII Certain defects	in the international appli	ication					
Box No. VIII Certain observations on the international application							
Date of submission of the demand		Date of completion of this report					
11 November 2003 (11.11.2003)		04 Feb	04 February 2005 (04.02.2005)				
Name and mailing address of the IPEA/EP	F	Authorized officer					
Facsimile No.		Геlephone No.	phone No.				





Box No). I	Basis of the report						
1. With othe	regare	I to the language, this report is based on the international application in the language in which it was filed, unless indicated under this item.						
	This report is based on translations from the original language into the following language which is language of a translation furnished for the purpose of:							
	Ш	international search (under Rules 12.3 and 23.1(b))						
		publication of the international application (under Rule 12.4)						
	international preliminary examination (under Rules 55.2 and/or 55.3)							
	re not	d to the elements of the international application, this report is based on (replacement sheets which have been the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" annexed to this report): International application as originally filed/furnished						
		escription:						
لكا	pages							
	pages	as originally filed/firmishe						
	pages							
	the cl							
	pages							
	pages	, as originally filed/furnishe						
	pages	, as amended (together with any statement) under Article						
	pages							
\square	the dr	awings:						
	pages	1.2						
	pages	1-3 , as originally filed/furnishe						
	pages							
LJ	a sequ	ence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing.						
3	The ar	nendments have resulted in the cancellation of:						
		the description, pages						
		the claims, Nos						
	\sqcap	the drawings, sheets/figs						
		the sequence listing (specify):						
		any table(s) related to sequence listing (specify):						
		system (1) related to dequence listing (specify).						
	(Rule 1	eport has been established as if (some of) the amendments annexed to this report and listed below had not been since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box 70.2(c)). the description, pages						
		ies, some or all of those sheets may be marked "superseded."						

INTERNATIONAL PREMINARY EXAMINATION REPORT

Inte nal application No. PC17EP 03/10576

V. 	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1.	Statement			
	Novelty (N)	Claims	6, 7, 11, 12	YES
		Claims	1-5, 8-10	NO
	Inventive step (IS)	Claims		YES
		Claims	1-12	NO NO
	Industrial applicability (IA)	Claims	1-12	YES
		Claims		NO NO
2.	Citations and aumientations			

2. Citations and explanations

A generally known method for reducing echoes is described in document US-A-6 085 072 (D1). According to this method the downlink data S2 arriving from the telecommunications system are decoded (in the decoder 6) and copied (the upper output S8 of the "output buffer" 8), and the copy is sent to an echo canceler 14. The decoded downlink data (D4) are then sent to the terminal (speaker 10). However, all the steps for reducing echoes are carried out in a terminal.

Although in document D1 the echo is reduced exclusively in the terminal, echo reduction inside a telecommunications network is also known (see document US-A-5 835 486 (D2)). In document D2 a copy is made of the downlink data ("reference signal 310" in figure 3) transmitted from the telecommunications network to the terminal, and this copy is decoded in a decoder 301 and used to reduce the echo in the uplink signal ("near-end signal" at the input of the decoder 308). In particular, a signal est(i) which is subtracted from the decoded uplink signal s(i) is generated from the downlink signal. As a result, all the features of claim 1 are known from document D2 (PCT Article 33(2)).

The feature of claim 2 is likewise known from document D2. In particular, both the downlink data copy and the uplink data (inputs of 301 and 308) are decoded and, with the aid of the blocks 302 to 305, that is to say, taking into account the decoded downlink data copy, an echo in the decoded uplink data is reduced by the subtraction s(i) est(i).

The feature of claim 3 is directly known from document D2 (see the first sentence of the abstract). The feature of claim 4 also seems to be known from document D2, since the downlink data copy is recoded only in the decoder 301. The feature of claim 5 likewise appears to be known from document D2 because in document D2 the downlink and the uplink data are also encoded with a mobile codec format $(\mu\text{-law})$. Claims 6 and 7 concern only routine developmental measures which are not intrinsically inventive.

The above objections apply analogously to claims 8-12, which correspond to claims 1 and 4-7.